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ABSTRACT

The guide, developed by the Secondary Transition and Employment Project (STEP) in Idaho, provides an overview of its sequential vocational curriculum intended to help students with mild, moderate, and severe handicaps to: (1) identify their vocational preferences and aptitudes; (2) use community resources to find out about jobs; (3) observe and sample jobs in the community; and (4) learn the necessary skills to enter competitive or supported work when they leave school. Program philosophy stresses its assessment based, comprehensive, functional, age-appropriate, integrated, and social nature. A chapter on effective instruction stresses development of an instructional plan and factors (such as instructional sequence and learning style) to consider. The chapter on effective implementation strategies suggests starting small, developing resources, resolving problems, and establishing credibility with the community. The four phases of the STEP model (career exploration, work exploration, career focus, and job preparation) are then detailed. Finally, STEP project products including field manuals, guides for transition planning, and staff development modules are listed. (DB)

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STEPPING OUT

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AN OVERVIEW OF THE STEP CURRICULUM

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STEPPING OUT

AN OVERVIEW OF THE STEP CURRICULUM

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INTRODUCING

STEP

A VOCATIONAL CURRICULUM FOR STUDENTS WITH HANDICAPS

Students with handicaps often face an uncertain future after they leave high school. Many have not had opportunities to explore their vocational interests. They have had limited work experience while in school and have little information about the skills they'll need to work at the jobs typically available in their community.

It doesn't have to happen this way. A planned sequence of school- and community-based vocational instruction can help students with mild, moderate, and severe handicaps: (1) identify their vocational preferences and aptitudes, (2) use community resources to find out about jobs, (3) observe and sample jobs in the community, and (4) learn the skills they will need to enter competitive or supported work when they leave school.

In designing a vocational curriculum for students with handicaps, educators must deal with three issues:

1. **What should we teach?** What are the characteristics of a vocational program which effectively prepares students to obtain work after leaving school?

2. **How should we teach?** What are the current best practices for effectively teaching essential skills?

3. **How do we get started?** Is it better to start small or to implement all components of the secondary vocational curriculum at once?

A variety of models have been proposed for implementing secondary vocational education for students with handicaps. Before choosing a model or selecting components of several models for implementation, planners should consider the philosophic assumptions on which the various models are based and determine whether the assumptions interface with those of teachers, parents, and administrators in the local district. The philosophic framework for the rural secondary vocational model developed by the Secondary Transition and Employment Project (STEP) is presented here.

WHAT SHOULD WE TEACH?

CHARACTERISTICS OF EFFECTIVE VOCATIONAL PROGRAMMING FOR STUDENTS WITH HANDICAPS

ASSESSMENT-BASED

Because the relationship between assessment and curriculum is critical, the secondary vocational curriculum must provide for the initial and ongoing collection of data essential for decisions about job selection and training. Effective programming, then, depends on:

1. An accurate initial assessment of which skills a student will need to function in subsequent environments and whether or not those skills are currently in his or her repertoire;

2. A system for ongoing assessment of the level at which the student has mastered critical skills; and

3. An evaluation of the vocational program itself which indicates how efficiently the activities, materials, and instructional strategies utilized have enhanced student performance and which measures the effects of program on the student and the community.

Initial vocational assessment may be conducted formally or informally and can occur as early as the ninth grade. The initial assessment often helps target areas of job interest and establish priorities for instruction on job-related skills. Appropriate formal, norm-referenced instruments may be used to assess vocational interests and aptitudes for specific types of work. However, informal assessment techniques such as student questionnaires, anecdotal records, and inventories of the skills required to perform specific jobs often provide more useful information for planning an individual vocational program. Effective vocational assessment also includes input from parents and caregivers. Parents usually have priorities in terms of the types of programs offered to their children; they are a source of reliable information about what their children can do; and they often have ideas about the optimal environment for their children after they leave high school. Students should also be interviewed about what they can do and what they would like to do: a recent study indicates that, when asked, 86% of students with mild handicaps can provide a career goal (Deshler, 1985), and students with moderate and severe handicaps can also offer information about their skills and preferences. Students who are involved in planning their vocational programs are likely to be motivated to meet instructional goals. Initial vocational assessment, then, should consist of the following:

*An assessment of the student's ability to perform functional life skills (such as self-care, street crossing, telephone use, telling time) as these skills affect work placement and job performance;

*A parent interview in which parents/caregivers are asked not only to provide information about the student's work interests and aptitudes, but to express their preferences and priorities in terms of the vocational program developed for their son or daughter;

*A student interview in which the student's work history and preferences are explored and his or her ideas about possible work experiences are actively solicited; and

*A summary of the student's school records, including information about previous vocational classes or experiences, current level of academic functioning, physical restrictions, and preferred learning style.

Information collected during the initial vocational assessment can then be reviewed and vocational instruction objectives written.

Ongoing student assessment should be directly related to the vocational objectives. Evaluations of student job performance in work settings and in school-based vocational classes provide information about progress toward objectives and whether program changes are indicated. Ongoing student assessment also suggests the next level of vocational training which will meet the student's needs: on-the-job training, school-based vocational programs, or post-secondary vocational programs. Generally, informal measures such as production rates, employer or supervisor evaluations of student job performance, and student self-evaluations serve as reliable indices of student progress toward meeting vocational objectives.

A system for evaluating the vocational curriculum itself should be developed when the curriculum is designed. Criteria for program evaluation should include:

***Content evaluation:** How well did the curriculum address vocational needs?

1. Did program goals reflect the vocational needs of the students who participated in the program?

2. Did program goals reflect the employment needs of the community?

***Process evaluation:** How efficiently did the program operate?

1. What curriculum materials proved most useful?

2. How efficient were procedures for placing, training, and monitoring students in classes and on work sites?

3. Did the program make the best use of available resources, including support staff, community volunteers, parents, and service agencies such as Job Service and Vocational Rehabilitation?

*Product evaluation: What was the effect of the program on the participants?

1. What effect did training have on the employability of the participants?

2. How satisfied are former students with their jobs?

3. How satisfied are employers with employees who were participants in the program?

Program evaluation data can be collected from a follow-up survey of students who have completed the program: feedback from students, parents, and employers; and evaluations by teachers who have participated in the program on a collaborative basis, providing hands-on training.

COMPREHENSIVE

Although the primary focus of the secondary school program will be vocational, it is critical that educators determine whether students have had adequate opportunities to learn those skills which they will need to function in other areas of daily living, including the home, the community, and recreational and leisure settings. If these requisite skills have not been mastered, they should be incorporated into a systematic, coordinated vocational program. This may mean, for example, that a student who lacks community functioning skills would be taught to use public transportation and banking services as part of his or her work experience program in the sophomore or junior year.

For students with mild handicaps, programming at the secondary level is often fragmentary and disorganized. Planning is complicated by the students' participation in a variety of special education and regular classes, resulting in occasional duplication of instruction and, more often, inadvertent elimination of training in independent living skills. Programming is also hampered by an assumption that students with mild handicaps have the ability to gain these essential skills without systematic instruction. Thus, these students frequently leave school without the skills required to maintain a home or apartment or to function in the community. They often lack banking, budgeting, and consumer awareness skills, knowledge of community services, and appropriate interpersonal and sexual behaviors. Secondary programs for these students should, therefore, include instruction in interpersonal and independent living skills when it has been determined that these critical skills have not been mastered. Whenever possible, instruction in independent living should be coordinated with school- and community-based vocational programming.

For students with moderate and severe handicaps, it becomes even more imperative that programming extend across all domains. The vocational curriculum should be one component of an extensive community-based program which systematically teaches students to perform meaningful work, function as independently as possible at home, utilize available

recreation/leisure options, and move into the community to perform such essential tasks as shopping and obtaining medical care.

FUNCTIONAL

Developing and implementing functional vocational training programs for secondary students with handicaps has emerged as a major trend in special education. At the elementary level special education focuses on the early diagnosis of learning difficulties and the provision of remedial and adaptive measures to enhance the integration of children with handicaps into regular academic programs. However, as students with handicaps move from the elementary to the secondary level, appropriate programming changes its emphasis from remedial academic instruction to a model which provides training in those functional skills which will prepare students for the transition to independent living and to work or supported work environments.

Functional skills are those which enable a student to perform a task which otherwise would have to be performed for him or her. In this sense, the ability to use the telephone is very likely a functional skill for a number of students. Telephone use enables students to carry out a number of important activities at home, in the community, or at work without assistance from others--activities which might include answering the phone, taking phone messages for the boss, or calling a friend to go to the movies. On the other hand, the ability to sort nuts and bolts by size is probably <u>not</u> functional unless the student needs this skill to perform an activity: for example, to work independently on a job in the community which requires sorting bolts.

Physical or environmental adaptations may be used to enable the student to perform functional activities. For example, a counting jig may be used by a student with severe handicaps to keep track of the number of towels sorted on the job, allowing her to perform the task independently. Similarly, a student with mild handicaps may use a pad and pencil to write down the sequence of tasks his employer has asked him to perform each day.

As students prepare to leave school, instruction should focus on skills needed to perform activities in vocational, domestic, community, and recreational settings. This is especially critical in programming for students with severe handicaps because of the time required for them to achieve mastery level. Thus, it is inappropriate for a 19-year-old student with handicaps to be drilled on the names of state capitals or on just second or fourth grade spelling words when he is still unable to use a telephone and has had no opportunity to participate in a job-training program. When reading instruction is provided, it should emphasize a functional vocabulary. The words taught should be those needed to perform a specific job, such as reading container labels at a food preparation work site, or to carry out independent living tasks, such as making a phone call.

AGE-APPROPRIATE

Effective vocational programs are chronologically age-appropriate. Students with severe handicaps are often perceived and treated as young children. As a result, it is not unusual to see an adolescent student with severe handicaps dressed in a Muppet T-shirt, carrying a Care Bears lunchbox, or working at assembling and disassembling tinker toys in a self-contained class located in the basement of an elementary school. Students should engage in activities, wear clothing, use materials, and work in settings which are appropriate for their age.

INTEGRATED

Effective vocational programs maximize contact with nonhandicapped persons. The benefits of integration include improved instruction for students with handicaps (for example, the opportunity to participate in a regular auto shop class taught by a mechanic with 20 years experience) and a more accurate view of the handicapped by their nonhandicapped peers. In school-based instruction, maximizing contact means integration into regular classes when possible. For students with mild handicaps, several strategies may be employed which will enhance the ability of these students to benefit from mainstreaming most of the school day. These include curricula and materials adaptations, development of individual learning strategies, structuring the learning and evaluation activities ao that they are cooperative rather than competitive in nature, peer tutoring, collaborative teaching by the special education teacher and the regular teacher, and consultation services provided by the special education teacher.

For students with moderate and severe handicaps, school-based instruction may be enhanced by peer tutoring, provided the tutors participate in an appropriate training program. Instruction may also be enhanced by proximal participation in regular classes when appropriate. In this model, special education students and their teacher are based in the regular classroom for instruction in a specific course; they participate with the whole group in activities to the extent that they are able and enagage in other activities as a small group within the regular class. For this population, the rationale for integration into regular classes may be learning appropriate interaction with nonhandicapped students rather than meeting the existing course objectives.

Integration also requires the extension of vocational programming into the community. This involves moving students from in-school work sites to training and work sites in the community where they can interact with nonhandicapped employees. In addition to expanding training options for students, community-based vocational programs enhance generalization by providing an opportunity for students to learn essential skills in actual work environments.

EMPHASIZES SOCIAL COMPETENCE

The importance of personal-social skills in the vocational adjustment of students with handicaps is becoming readily apparent as they are placed

on job sites in the community. A review of current research confirms that the ability to obtain and hold a job is related to social competence (Fulton, 1975). Employers tend to be less concerned about whether students are trained for specific tasks than whether they exhibit appropriate work behaviors (Vautour, Stocks, & Kolek, 1983). Zigmond and Brownlee (1980) found that success for persons with mild handicaps is related to effective social interaction with nonhandicapped persons. Similarly, Greenspan & Shoultz (1981), Becker, Widener, & Soforenko (1979) and Wehman (1981) found that the primary reason for job failure among MR adults was a lack of social skills. All students with handicaps, then, must acquire a measure of social competence if they are to maintain employment in community work settings.

Preliminary investigations by STEP staff have isolated two factors that mitigate against the employability of students with handicaps. First, these students have an inadequate ability to accurately perceive subtle distinctions in signals they receive from the environment. They have difficulty evaluating the significance of events and so they often fail to respond appropriately in a situation. Secondly, even when these students are aware of the nuances of a situation they do not necessarily respond appropriately: either the appropriate response/behavior does not exist in their skill repertoire or they are not motivated to respond appropriately.

STEP is developing modules to address these areas:

1. Career Exploration and Work Exploration: These modules train students to accurately observe, record, and perform the social interactions and specific work behaviors required to perform jobs in which they are interested.

2. Social Skills Assessment and Intervention: The focus of this module is to develop social skills which are needed on the job. Assessment consists of both cognitive measures and behavioral observation in natural environments. Those skills which a student is not performing are then taught in class using direct instruction, videotaped models, roleplaying with feedback, counseling, and planned generalization activities in the natural environment.

The characteristics of effective vocational programming delineated above indicate that training is best provided in a combination of school and community settings. Community-based programming enhances generalization, permits interaction with nonhandicapped persons, and promotes the acquisition of functional skills. Thus, programming for students with moderate and severe handicaps should take place for the most part in community settings. For students with mild handicaps as well, "hands-on" experiences in natural settings are a more viable method for teaching than reliance on lectures, discussions, and classroom visits by employers, although school-based instruction can be effective if activities are individualized to meet student needs and opportunities are provided for generalizing skills.

HOW SHOULD WE TEACH?

CHARACTERISTICS OF EFFECTIVE INSTRUCTION

Best practices produce best results. A process for developing an instructional plan for students with handicaps and examples of grouping strategies which facilitate instruction are outlined below.

DEVELOPING AN INSTRUCTIONAL PLAN

Conduct a task-related pretest. This may be an informal observation of the student performing the task; a cognitive assessment of the skills observed as needed to perform a task; or the use of a task analysis checklist or ecological inventory to assess the student's performance on a work site.

Determine desired outcomes. Decide what the student should be able to do as a result of instruction and delineate the performance criteria:

1. In what setting the skill will be performed;
2. With what degree of accuracy;
3. With what degree of proficiency (speed);
4. For how long (duration);
5. Following what cue, and how long after the cue (latency);
6. With what adaptations (assistance, supervision, materials or devices, environmental arrangements).

Generate performance objectives that reflect the desired outcomes.

Determine the best instructional approach. Factors to consider include:

1. Instructional sequence--Determine the order in which the skills required to perform a task should be taught. One set of instructional experiences should be built on another.

2. Learning style--Review formal and informal assessment data to determine each student's preferred modality for encoding, processing and expressing information. For example, one student may learn best from information presented with visual aids such as overheads, diagrams, or models, while another student may require an approach which emphasizes an auditory mode of reception such as oral discussions, rhymes for recalling information, and taped lessons.

3. Materials--The instructional materials selected should be matched to individual learning style and necessary adaptations should be made to accommodate the learner.

4. Duration of instruction--Determine the optimum length of time to engage students on each learning task: enough time to attain mastery, but not enough time to get bored.

5. Prompts--Establish a system of prompts and cues to elicit desired behaviors. Ideally, natural cues should be used although in the early phases of learning artificial prompts may be required. For example, Andrea is placed in the technical services division of a public library. One of her tasks is preparing new books for circulation. For each book, this involves gluing the card pocket to the back cover, stamping the flyleaf, typing the call number on a gummed label, and inserting a magnetic strip into the spine. In the acquisition stages of learning, Andrea required fairly intrusive prompts, such as a demonstration by her instructor of the activities she was to perform. Modelling was eventually replaced by less intrusive verbal prompts (such as " Where does the magnetic strip go?") which were gradually faded as Andrea became more proficient. Now, the supervisor is required only to hand Andrea a stack of new books and this initiates the series of activities which Andrea performs to accomplish the task of preparing the books for shelving.

6. Reinforcers--Select appropriate reinforcers for performance, using those which occur naturally in the situation when possible. For example, when Larry mastered the steps involved in changing a tire at his job training site, his work supervisor relieved him of sweeping the shop floor and promoted him to changing customers' tires instead. The promotion is a natural consequence of learning to change a tire at this job site and so is a more appropriate reinforcer than artificial reinforcers such as verbal praise or tokens.

   Programs which focus on intrinsic controls such as goal-setting, self-monitoring, self-evaluation, and self-reinforcement promote learner independence and have been successfully used with students (Seabaugh & Schumaker, 1983; Tollefson, Tracy, Johnson, & Chatman, 1983).

   Extrinsic controls which are not related to performance of the task, such as giving a student candy for correctly counting out ten towels, should be avoided.

   Although they can be briefly useful in eliciting behaviors until intrinsically motivating factors become apparent to students, programs which use extrinsic controls exclusively are of limited usefulness for a number of reasons. First, the most potent reinforcers for adolescents are usually beyond the ability of teachers or parents to provide (Deskler, Schumaker, & Lenz, 1984). Secondly, extrinsic reinforcers do not produce an independent learner: Lepper (1983) found that a token economy may make the learner more dependent on external controls. Finally, counseling or conferencing procedures which use the social approval of adults result in little or no increases in productivity (Seabaugh & Schumaker, 1981).

7. Grouping arrangement--Determine the most efficient method for grouping students based on the purpose for instruction: skill

acquisition, maintenance, or generalization. Examples of these grouping strategies include:

* **Large group instruction:** This approach reflects the traditional class setting and is an efficient use of instructional resources for introducing skills to a number of students with a similar need. Within this setting, individual differences can be accommodated by varying materials, providing an explanation of the skills to be taught and a rationale for their use, involving learners in activities rather than simply presenting information, modifying requirements and grading, and using a multisensory instructional approach which combines auditory and visual presentations of material. Although large group instruction makes maximum use of the instructor's time, the need to provide for the diverse needs of students with handicaps limits the usefulness of this approach, particularly for moderately and severely handicapped populations.

* **Small group instruction:** This grouping strategy offers a more efficient use of instructional resources than a tutorial arrangement. Additional benefits include the opportunity for incidental learning (students learn from observing others in the group) and the provision of peer validation and correction. Although small group instruction has been used primarily with mildly handicapped students, recent studies have confirmed that developmentally disabled and severely handicapped students can be taught in groups as or more effectively than in tutorial instruction (Alberto, Jobes, Sizemore, & Doran, 1980; Favell, Favell, & McGimsey, 1978; Fink & Sandall, 1980). The effectiveness of this strategy depends on the compatibility of the students in the group and the ability of the instructor to develop and implement an instructional plan which may require teaching several skills simultaneously.

  If no relationship exists between the skills to be taught in the small group, the instructor rotates from one group member to another, with each student receiving a different type and amount of attention.

  If all students in the group are to be taught the same skills, students may act as models, validators, peer instructors, or data takers for other students. For example, a small group of students who are learning a skill essential for appropriate social interaction may observe a group member model the skill. Other members may provide corrective feedback ("You should tell the secretary who you want to see") and validation ("That's right"). They may also evaluate peer performance on a checklist. One student may also keep data to measure progress toward an individual objective for another student: for example, during the

lesson Susan may keep a tally of the number of times James spontaneously contributes to the group discussion.

* **Computer assisted instruction:** The advantages of microcomputers (Schiffman, Tobin, and Buchanan, 1982) for teaching mildly handicapped students include:

  -The student can make mistakes in a nonthreatening environment;
  -The student has the computer's undivided and patient attention;
  -The student gets immediate reinforcement;
  -The novelty of the technology motivates the student;
  -Programs can simulate real-life experiences so that the student is allowed to make decisions and see consequences; and
  -The instructor may use the computer to collect frequent and direct data as a basis for decisions about instructional interventions.

  Although the use of this new technology in secondary vocational programming is limited by the availability of appropriate software and computer-literate teachers, some possible school-based applications include:

  Interactive video programs to teach learning strategies, problem solving, and social skills.

  Programs to improve functional reading. Word recognition efficiency (fluency and accuracy) has been identified as a major reading problem for learning disabled students (Torgeson & Young, 1983).

  Wordprocessing programs for maintaining vocational journals. Students use the journals to record information about specific careers, make observations about working conditions or their job sites, and evaluate their job performance.

* **Individual instruction:** Because one-to-one instruction requires additional instructional resources or may result in "dead time" for other students who are not able to work on their own and who do not have an instructor to assist them, this strategy often proves to be the least efficient grouping method. This technique may also promote dependence on the instructor when it is used as the primary method of instruction. The best application of individual instruction is during the acquisition phase of learning, such as the initial training of a student with moderate handicaps on a job site or the introduction of a learning disabled student to a learning strategy which will help him take better notes in class.

Decide on the method for data collection, including:

1. Who will take data--teacher, student, aide, volunteer;
2. How frequently data will be collected;
3. What type of data will verify that progress was made toward meeting objectives; and
4. What criteria will be used for determining that an alteration in instructional approach is indicated.

Plan skill maintenance and generalization activities. Regardless of the nature of the handicapping condition, students with handicaps have difficulty generalizing skills to novel situations. When possible, instruction in situation-specific skills should take place in the setting in which the student will be expected to perform the skill. For example, instruction in assembling picture frames should take place on the actual job site, using the materials and equipment available to workers on the site. If instruction must occur in other settings such as the resource room, efforts should be made to simulate the natural environment, adequate skill practice should be provided, and probes should be collected on student progress in the natural environment. Consider the following situation: an assessment of a student's performance on a community job site indicates that he does not have the skills to ask for help when he has a problem, and the employer has remarked that the failure to ask for help may cost the student his job. Learning these skills becomes a high priority for maintaining employment. Instruction may take place in the classroom to allow adequate opportunities for the student to observe models and to roleplay situations taken from the job. However, it cannot be assumed that because the student appropriately models the target behavior in class, he will do so in a naturally occuring situation on the job. The instructor must systematically collect performance data on the student at work by direct observation or in conferences with the employer.

If the target skill is one which is required in a variety of settings, generalization can be enhanced by cooperative planning with other teachers and the job site supervisor so that the student is provided an opportunity to practice the new skill in other classes and on the job.

HOW DO WE GET STARTED?

CHARACTERISTICS OF EFFECTIVE IMPLEMENTATION STRATEGIES

Once a model for secondary vocational training for students with handicaps has been developed, planners must make decisions about how the model can be implemented. Practically speaking, any implementation strategy is the "right way"--as long as it works. The degree of administrative and community support and the needs of the student population will dictate the implementation sequence. In some cases, for example, it is advisable to approach the school board with a carefully prepared proposal for initiating a community-based vocational program. In other districts, a better approach might be to implement one component of the vocational education model with the support of the director of special education, and having demonstrated success, make a presentation to the school board requesting continued support or funding.

Generally , however, the best plan is to start small, targeting a specific student population and identifying their vocational needs. For example, the teacher may opt to implement an initial work experience unit for senior students in the resource room who have never worked in the community. Or the district may determine that it needs to implement a transition process for students with severe handicaps who will be leaving school in June and who have no viable postsecondary options.

The advantages of starting small include the opportunity to:

1. Develop resources:

   a. Parents--Involve parents of students with handicaps from the beginning. Parents can provide input into vocational planning for their children, supply job site leads, voice their support of vocational programming in school board meetings, and assist with program needs--for example, by working with adult service agencies to put on an information fair at the high school.

   b. Curricula--Once the student population has been identified and the scope of the initial program has been determined, it is essential that objectives for the program be delineated and that appropriate assessment techniques, activities, materials, and instructional methods be selected. Curriculum materials for career exploration and work experience units are included in STEP manuals; additional materials may be available through state curriculum dissemination centers, from school districts which are implementing vocational programs for students with handicaps, and from other model demonstration projects.

c. Staff--Effective programming requires the ability to make the best use of available staff. In some cases, additional staff may be allocated for implementing the vocational program: in most cases, expansion of programs for the handicapped must be accomplished with existing staff. An informational packet (Baumgart & VanWalleghem, 1986) containing strategies for maximizing available special education and support staff can be obtained from STEP.

In addition to special education staff, other members of the school team may wish to be involved in vocational programming for students with handicaps. Implementing a pilot program allows vocational teachers and counselors who have expressed an interest in working with special education students to do so on a time-limited basis with the support of the district. As an alternative to working directly with students, these team members can work with the special education teacher on a collaborative basis, providing information from their areas of expertise.

Another resource which the special education teacher may develop is a pool of trained volunteer tutors. These instructional helpers may be adults or other students. For vocational programming to be effective, however, tutors should be trained in behavior management and data collection techniques.

d. Job training sites--Implementing the work experience component of the vocational model on a limited scale initially will allow the teacher time to carefully develop community training sites which are tailored to the needs of his or her students. It will also ensure that the sites are carefully monitored during training so that the experience will be a positive one for both student and employer. Finally, the teacher will have time to develop additional sites for future placements by personal contact and presentations to community business and service organizations. Suggestions for developing job sites are contained in the staff development modules from the Adult Work Project and are available from STEP.

2. Resolve problems:

a. Logistic--A pilot project provides the opportunity to work out the best solutions to such problems as alterations to schedules, delegation of new responsibilities, and coordination of new programs.

b. Attitudinal--A major barrier to implementing new programs is the resistance of those affected by the change. Starting small reduces the degree of discomfort experienced, for example, by vocational teachers who have been asked to allow a learning disabled student to participate in an auto

shop class or by adult service agency providers who are being invited for the first time to participate in transition planning for moderately handicapped students who will be leaving school.

c. Legal--Implementing new programs often raises legal issues such as the necessity for revising the students' IEP's to reflect program changes and the question of district and employer liability for students placed on job sites. Starting with a single component of the vocational model allows districts to focus on legal issues related to that component immediately and to deal with questions related to other parts of the model later. Staff development modules dealing with these issues, Community-Based Vocational Training: Federal and State Wage and Hours Regulations and Insurance and Liability Issues are available from STEP.

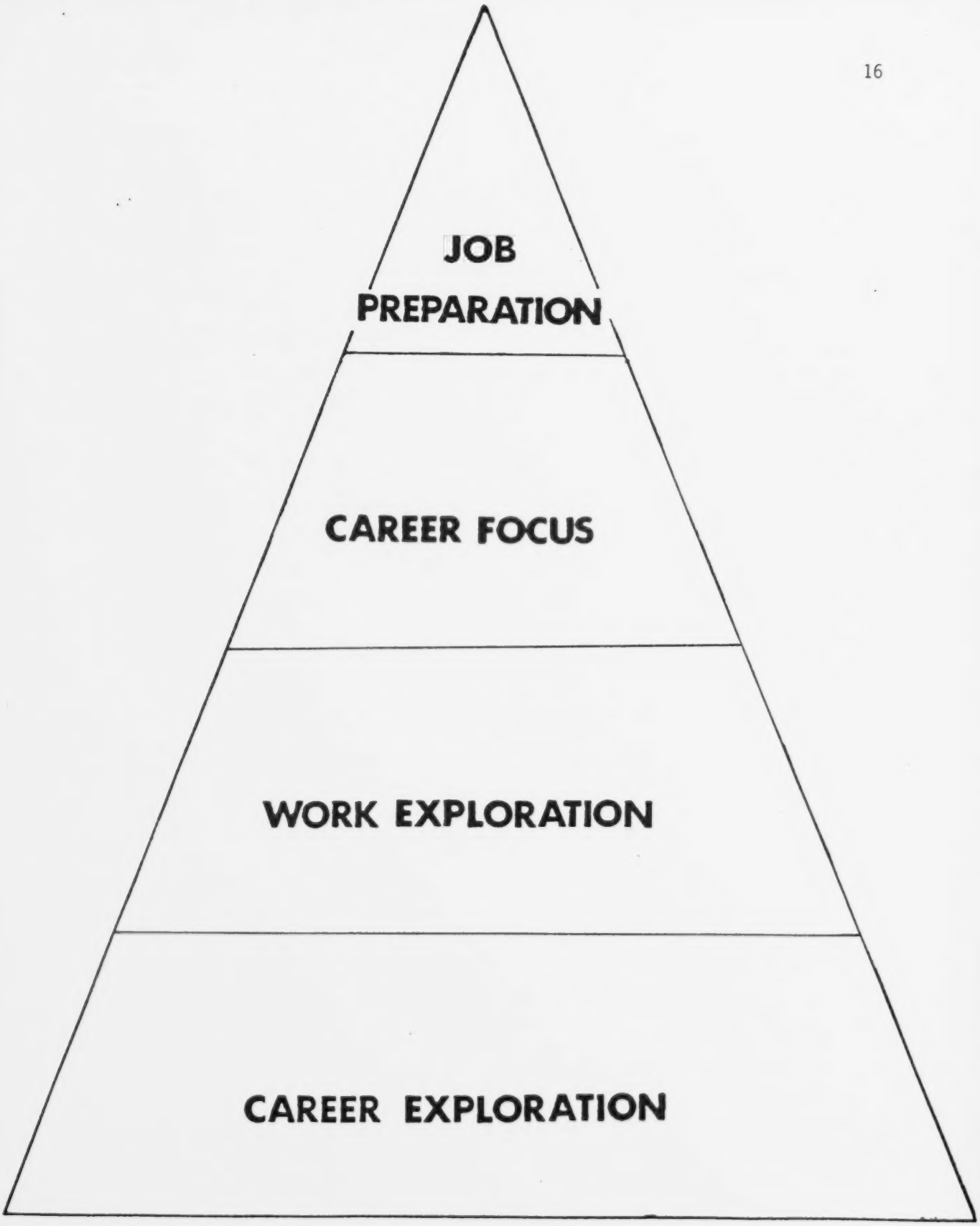
3. **Establish credibility with the community:**

Starting small allows planners to focus their efforts on developing a quality program. Soliciting input from and attending to the concerns of parents, employers, and service agency representatives enhances the probabilty that the program will gain community acceptance. Often, placement of students with handicaps in community settings results in a more positive perception of their abilities by others. STEP staff have found that employers, who may be initially apprehensive about training these students, express a high degree of satisfaction with student job performance and encourage other employers to participate in the program.

4. **Establish credibility with the school district:**

Because implementing a small, manageable program allows planners to anticipate and resolve problems, this approach enhances the probability of success. Once it has been demonstrated that the program is viable and meets student needs, it becomes easier to solicit the support of the school board, district administrators, and school personnel.

Once program planners have successfully launched what has been determined to be a high-priority vocational program for students with handicaps, they can set timelines for implementing additional components of the model. Decisions about when and how to do so should be based on a careful assessment of student needs and the priorities of parents and district personnel.



THE STEP MODEL

THE SECONDARY TRANSITION AND EMPLOYMENT (STEP) MODEL

STEP provides a school and community-based model for secondary vocational programming for students with mild, moderate, and severe handicaps. It relies on ongoing vocational assessment to structure individualized activities which teach age-appropriate, functional employment skills in integrated settings; and it incorporates assessment of, and instruction in, job-related social skills.

The four phases of the STEP model are outlined below. The phases should be implemented sequentially and information gained by both teachers and students in earlier phases is meant to contribute to the learning and teaching processes in the next phase.

PHASES OF THE STEP CURRICULUM

Phase I: Career Exploration

Career Exploration typically occurs during grades 7, 8, or 9 for mildly handicapped students, or at ages 12 to 15 for students with moderate or severe handicaps. The goals of the instructional team during this phase are to:

1. Collect information about student's functional skills;

2. Summarize information about student's vocational interests and activities.

The student will:

1. Explore the concept of work, values associated with work, and reasons people work;

2. Use a variety of information sources to learn about jobs/careers and to generate an individual list of local employment options;

3. Learn critical skills for obtaining job/career information through personal interviews;

4. Learn to systematically observe work and analyze the critical skills needed to perform the job; and

5. Use available resources to pursue after school or summer employment preferences.

Phase II: Work Exploration

Work Exploration draws together all the information and training provided during Career Exploration and typically occurs in grades 9 or

10 for students with mild handicaps and between the ages of 14 and 17 for students with severe handicaps. At this point the student has been introduced to the concept of work, and the parents of the student have begun to see their son or daughter as a person who will probably leave home and go to work. During Work Exploration, the teacher can gain valuable information about work skills and the application of academics on the job. This phase is not to be used as a preparation for a specific job or career, but rather as a training phase during which the student can (1) work at a job in which he or she has expressed interest, (2) develop attitudes towards work, and (3) conduct self evaluations of work performance.

Critical activities during work experience include instruction in job-required academics, continued training in the areas of essential employee work habits, and training/supervision on the job. Through these activities, students can experience the demands of work and assess their preferences, and the teacher or other instructional team members can gather assessment information on the students' work and work-related skills.

The goals for Work Exploration are to:

1. Place a student on a work site which is consistent with the student's and parents' preferences;

2. Provide students an opportunity to experience the reality of work and to re-evaluate their understanding of those skills required on the job; and

3. Identify and provide instruction in the academic and social skills required to successfully perform the job.

Phase III: Career Focus

This phase involves formal assessment of a student's career objectives and plans, provision of training necessary to meet vocational/career objectives, and career counseling. Phase III typically occurs in grade 10 or 11 for students with mild handicaps and at age 18-21 for students with moderate or severe handicaps. The goals are to:

1. Determine the student's aptitudes over a wide range of career/job options;

2. Develop a plan for providing training specific to a student's career/job preference;

3. Develop skills essential for obtaining employment, including social skills, job finding skills, and job performance skills;

4. Develop with the student a list of long-range work and work-related objectives in response to a variety of in-class activities; and

5. Develop a series of short-range transitional objectives designed to assist the student in meeting long-range work and work-related objectives.

Phase IV: Job Preparation

During this phase (grades 11 or 12 for students with mild handicaps and ages 18-21 for students with moderate or severe handicaps), the student's vocational choices and experiences are reviewed, a prescriptive training program is developed, and the student begins to develop the vocational skills required to be successful on a specific job. Within this model, two training options are possible: school-based training and community-based training.

School-based training offers optional career/job training in vocational and industrial education classes that are already operating within the school district. Community-based training consists of on-the-job training or a paid work experience in the community on some or all of the tasks which comprise an employee's job description.

The teacher reviews the employment choices of each student and determines whether he or she can currently perform all the job tasks or only some of the job tasks. In instances in which a student cannot perform all the job tasks, the teacher considers skill training, adaptations or revising the job description.

The goals for this phase are to:

1. Delineate appropriate methods of providing specific job training: school based, community based, or a combination of the two;

2. Secure a job training site or arrange a vocational class placement;

3. Delineate specific job tasks students need to perform, and delineate training, adaptations, or other strategies which will enhance performance;

4. Develop instructional programs or contracts with students for job training/work experience;

5. Contact adult agencies and formalize final transition plans; and

6. Explore job placement with students and employers.

STEP PRODUCTS

A number of products are being developed, field tested, evaluated, and disseminated in conjunction with STEP. We invite you to review these materials as they become available and to share information with us about your activities in the area of secondary vocational programming for students with handicaps.

*** VOCATIONAL PROGRAMMING ***

Step Field Manuals

These manuals provide an overview of the STEP model and contain suggested activities and forms for implementing vocational goals for all students with handicaps.

1. **Stepping Out: An Overview of the STEP Curriculum.** Presents criteria for determining the content of the vocational curriculum, describes best instructional practices, and outlines strategies for implementing a vocational curriculum for secondary students with handicaps.

2. **Vocational Assessment for Special Educators.** Presents a curriculum-based vocational assessment process.

3. **Career Exploration for Students with Mild Handicaps.** Contains goals, activities, and forms for implementing a school- and community-based career exploration curriculum for students with mild handicaps.

4. **Career Exploration for Students with Moderate and Severe Handicaps.** Contains goals, activities, and forms for implementing a school- and community-based career exploration curriculum for students with moderate and severe handicaps.

5. **Work Exploration for Students with Handicaps.** Contains goals, activities, and forms for placing all students with handicaps in an initial work experience based on identified skills and preferences.

6. **Career Focus for Students with Handicaps.** Contains goals, activities, and forms for providing additional training on skills needed to perform a specific job of choice. Includes strategies for training in the community or in regular or adapted vocational classes.

7. **Job Preparation for Students with Handicaps.** Contains goals, activities and forms for providing a final work experience on a job at which a student intends to work after exiting high school.

8. **Staffing Strategies.** Offers suggestions for optimal use of instructional and support staff in implementing secondary vocational programs for students with handicaps.

9. **Social Skills Assessment and Intervention.** Assessment and instruction of job-related social skills are addressed in this package, which includes a review of current issues, guidelines for constructing a community-validated assessment instrument, and procedures for assessing and teaching essential skills to students with mild, moderate, and severe handicaps.

*** TRANSITION PLANNING ***

1. **Making Transitions Work: Long- and Short-Term Strategies.** Offers suggestions to school districts for identifying students in need of transition planning and ensuring that they connect with appropriate adult service agencies.

2. **Making Transitions Work: An Adult Services Directory.** A directory of federal, state, and local government agencies and private resources which provide services to adults with handicaps in Moscow, Idaho. Available on diskette, the format can be used to prepare a similar directory for other communities.

ADULT WORK PROJECT PRODUCTS

Staff Development Modules

These self-paced instructional modules are accompanied by videotapes (VHS format) illustrating recommended techniques. Developed to provide inservice training for trainers of adults with developmental disabilities on community work sites, they can be used by school district personnel who want to learn effective techniques for approaching employers, developing training plans, and monitoring student progress on community work/training sites.

1. **Community-Based Vocational Training: Federal and State Wage and Hour Regulations.** Describes regulations which impact community-based training programs. Teaches staff how to establish the existence of an employer/employee relationship, determine productivity rates, and apply for subminimum wage certificates.

2. **Community-Based Vocational Training: Identifying and Approaching Employers.** Delineates procedures for conducting a community survey and techniques for successfully obtaining work observation and job training sites.

3. **Community-Based Vocational Training: Insurance and Liability Issues.** Describes insurance and liability issues related to community-based training and suggests strategies for ensuring adequate coverage.

4. **Community-Based Vocational Training: Job Analysis.** Teaches the ecological inventory process for analyzing jobs in terms of the functional and social skills required.

5. **Community-Based Vocational Training: Instruction.** Provides training in using the ecological inventory process to assess trainees, determine possible adaptations, and develop an instructional plan.

6. **Community-Based Vocational Training: Data Collection.** Teaches data collection and analysis, including the use of computerized systems.

7. **Community-Based Vocational Training: Supervision.** Suggests strategies for supervising trainees on community sites.

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